Slip Sliding Away—
KBO biologists document declining populations of Neotropical migratory songbirds
Nat Seavy, KBO Research Associate

Long-term trends are used to measure change through time. Familiar examples of trends include measures of economic growth, such as unemployment, new home sales, and stock market performance. As economists track these indicators, dips in a single given month or year are not as important as are continuing decreases over several time periods. Like investors trying to evaluate the health of the stock market, conservation biologists use long-term trends in bird populations to evaluate ecosystem health.

KBO tracks trends

Since 1993, the Klamath Bird Observatory has monitored bird populations at riparian sites on the Klamath River in northern California and the Rogue River in southern Oregon. This work has been conducted in cooperation with the Bureau of Land Management’s Oregon State Office and Medford District, the US Forest Service Pacific Southwest Region, and Oregon-Washington and California Partners In Flight. Between April and November of each year, KBO biologists have visited these sites at least once every 10 days and used mist nets (soft fine polyester). (Continued on page 2)

Unlocking the Data
John Alexander, KBO Executive Director

Klamath Bird Observatory biologists gather information about birds in the Klamath-Siskiyou Bioregion. The information collected is analyzed and used to make conclusions about bird populations. To get this information to the public, KBO publishes our findings in peer reviewed journals, conducts community outreach programs, and provides land managers with information enabling them to integrate bird conservation objectives with their land management plans. Translating our science to land managers in a format that is easily accessed and assimilated into land management practices is critical for conserving habitat on our public lands. One way KBO translates our science to land managers is through the development of Decision Support Tools (DST). DSTs are brief summaries of our scientific research papers that relate our findings with challenges faced by managers during the planning and implementation of land management policies. One of our recent DSTs links data about oak woodland bird communities to fuels treatments (removal of flammable vegetation). The DST enables managers to consider the habitat needs of bird species associated with edges, shrubs, and small snags when planning fuels treatments. Our partners at the Bureau of Land Management (BLM) Medford District are using this DST to write (Continued on page 3)
nets) to safely capture birds. Each bird receives a uniquely numbered band, biologists record detailed information on the age and condition of these birds, and then they are released. Data from mist netting can be used to answer many questions about bird populations including; How long do birds live?, or Is a population decreasing, increasing, or stable?

This year, we used these data to investigate population trends of 31 species of breeding and migrant birds occurring at these two river-side sites. Of these species, we found that many Neotropical migrants had declined over the ten year period. That is, the number of birds we captured each year consistently decreased in a fashion that would be unlikely to occur as a result of random changes from year to year. Among the declining species were Yellow and MacGillivray’s Warbler (see graph).

We also compared these population trends with those from the Breeding Bird Survey (BBS), a nationwide program that uses counts of birds to monitor bird populations (see box). Over the same time period, the BBS and our mist-netting trends corresponded well; most of the species for which we identified decreasing population trends were also identified by the BBS as species that were decreasing. Comparing local trends to larger-scale BBS results provides information about local and regional patterns and adds to the increasing evidence that regional population declines are occurring in songbirds.

When long-term trends indicate economic problems, the federal government can take actions to make adjustments, such as lowering interest rates. Similarly, trends in bird populations can indicate that adjustments to land management practices need to be made. Collaborative projects that KBO is conducting with local management agencies are aimed at understanding how new management practices can be implemented to reverse declining population trends of these birds.

**The Breeding Bird Survey (BBS)**

The BBS is a long-term bird monitoring program initiated in 1966 to track trends of North American bird populations. In response to declining bird populations, the use of DDT as a pesticide, and Rachel Carson’s groundbreaking book *Silent Spring*, Chandler Robbins and colleagues at the Patuxent Wildlife Research Center developed the North American BBS to monitor bird populations in North America.

Each year during the height of the nesting season, participants skilled in bird identification collect data along roadside survey routes. Each survey route is 24.5 miles long with stops at 0.5-mile intervals. At each stop, a 3-minute point count is conducted. During the count, every bird seen or heard within a 0.25-mile radius is recorded. Over 4100 survey routes are located across the continental U.S. and Canada.

Biologists use this valuable data set to track bird population change over time. All data is available on-line at [www.pwrc.usgs.gov/bbs/](http://www.pwrc.usgs.gov/bbs/).
Unlocking the Data—continued

(Continued from page 1)

fuels treatment prescriptions that are more beneficial for bird species.

In April 2005, KBO hosted a joint workshop of the Oregon/Washington and California Partners In Flight chapters. The meeting was attended by over 100 conservation planners, biologists, land managers, and researchers who came together to focus on integrating conservation objectives with agency policies and land management plans for coniferous forests. The workshop resulted in a conservation planning strategy that includes: 1) developing products that provide tools designed to help land managers make more-informed decisions regarding land management planning; and 2) identifying examples of ‘success stories’ where science-based Partners In Flight products were used to make land management decisions that benefit the conservation of bird species. KBO’s oak woodland DST was used as an example of such a product, and the BLM’s use of this tool is an example of a ‘success story’. A collection of similar success stories will be published by Oregon/Washington and California Partners in Flight during the next year. This paper will demonstrate how partnerships between bird conservation groups and land managers can yield measurable successes.

Spring Banding Update
Bob Frey–KBO Biologist

Springtime showers, a rainbow of flowers, and warm breezes blow new leaves ... and one of nature’s wonders passes before our eyes — a great migration of birds. During April and early May, KBO biologists, document the passage of birds on migration. Here are a few highlights-

Many flocks of Greater White-fronted Geese numbering more than 1,000 birds flew high overhead during April, with one flock numbering over 2,800! Winter residents like the Ruby-crowned Kinglet, Lincoln’s Sparrow, and Golden-crowned Sparrow left for the boreal forests of Alaska and Canada, while many other species arrived after an arduous journey from their winter home in Mexico and Central America. These Neotropical migrants included Hammond’s Flycatcher (first captured/observed April 21), Gray Flycatcher (May 4), Orange-crowned Warbler (April 15), Northern Waterthrush (rare in Oregon — May 23), Wilson’s Warbler (April 15), Black-headed Grosbeak (May 13), and Black Terns (May 13).

We also recaptured (captured and banded during previous years) many migrants returning to their nesting territories, including the Dusky Flycatcher, Warbling Vireo, American Robin, Orange-crowned Warbler, Yellow Warbler, Audubon’s Warbler, MacGillivray’s Warbler, and Bullock’s Oriole.
Education

People, Pets, and Bird Conservation
Melissa Pitkin, KBO Education and Outreach Coordinator

Healthy habitats benefit people and the organisms that depend on them. As people concerned with environmental quality and health, we strive to reduce our impact to our surrounding environment. Pet owners are faced with the dilemma of providing their pets with a stimulating, active life without threatening the survival of wildlife. For dog owners it means keeping dogs on leashes in designated wildlife areas and for cat owners it means keeping cats as indoor pets.

Keeping cats indoors is good for wildlife and your cat. Outdoor cats kill hundreds of millions of birds each year, in addition to reptiles, amphibians, and small mammals. Cats are an introduced species that threaten wildlife, just as Scotch Broom and Himalayan Blackberry threaten our habitats. Indoor cats live longer and healthier lives than outdoor cats. The average lifespan of an outdoor cat is 2-5 years while indoor cats may survive for 17 or more years. Indoor cats also avoid diseases, getting hit by cars, and predation. Veterinarians and the Humane Society promote keeping cats as indoor pets.

Can cats be happy as inside pets? Yes! Cats benefit from toys, climbing structures, and human attention. For outside experiences, cats can be trained to play in your yard on a harness or cat pen. For more information on indoor cat enrichment activities and outdoor cat enclosures visit the American Bird Conservancy website at www.abcbirds.org/cats.

Resource Advisory Committee Garden Project in Full Bloom
Sam Cuenca, Klamath National Forest Wildlife Biologist

Nearly 400 students and teachers from Yreka High, Mountague, Klamath River, Gold Street and Etna Elementary Schools participated in a unique project funded by the Siskiyou County Resource Advisory Committee. The funding supported the design and construction of beautiful outdoor wildlife gardens on each of their school’s campuses.

In cooperation with the U.S. Forest Service and the California Department of Fish and Game, these schools developed on-campus gardens designed to create habitat for songbirds, butterflies and bats. “These gardens truly serve as outdoor classrooms that provide a valuable and very unique learning experience,” said Sam Cuenca, project coordinator and biologist on the Scott River Ranger District.

During the early phase of the development of the gardens, students gained experience digging water systems, planting native plants, and installing bird nest boxes. “As the gardens become more established, students will be able to explore aspects of riparian restoration, horticulture, native plant growth and wildlife monitoring,” added Cuenca. Creating wildlife habitat (food, water and shelter) and learning the importance of restoration are among the primary concepts being taught through the garden project. The gardens not only provide areas of study, but areas where students can and enjoy nature.

Sam Cuenca and the Klamath National Forest, a KBO partner since 2000, improves conservation and education on our National Forests by initiating innovative projects such as this one.
Education

Bird Bio—Townsend’s Solitaire
Deborah Zierten, KBO Education Intern

Distribution:
Generally found in mountainous areas throughout the west from central Mexico to Alaska.

Habitat:
Breeds in montane coniferous forests on steep rocky slopes at moderate to high elevations

Feeding:
Flycatches (catch insects in the air) from exposed perches, in the non-breeding season they feed mostly on berries.

Life Span: Unknown

Conservation:
Populations have increased over the last 30 years, possibly due to increased forest openings.

Behavioral Notes:
Males sing from exposed perches but are quite while foraging close to the ground with mates. Aerial songs are only given by males and have been described as being complex, soft, and flute-like at times, often resembling the sound produced by the axle of a wagon in need of greasing. (Gabrielson and Jewett 1940)


Trivia Corner—Bird Migration
Melissa Pitkin-KBO Education Coordinator

Each spring and fall many bird species migrate, following changing food sources corresponding with changing seasons. Some birds travel amazingly long distances. The world’s longest distant migrant, the Arctic Tern, travels 11,000 miles between the North and South Pole twice each year. Other birds, like the Golden-crowned Kinglet travel short distances as seasons change. Golden-crowned Kinglets are found at low elevations in the winter but return to high elevation coniferous forests to nest and raise their young.

From the list below, which songbird travels the longest distance to breed in southern Oregon each spring and summer?

a. Hermit Warbler
b. Cliff Swallow
c. Rufous Hummingbird
d. Swainson’s Thrush
e. Western Wood-pewee

The Cliff Swallow winters in South America from Paraguay to Brazil to Central Argentina. A close relative, the Barn Swallow, winters from Mexico to Chile to Argentina. Other long distance migrants found in Southern Oregon include Western Wood-peewee (Peru and Bolivia), Olive-sided Flycatcher (Panama, Ecuador, Peru, Bolivia), and Swainson’s Thrush (Mexico to Nicaragua). Many of the warblers we find in southern Oregon winter throughout Mexico and Central America. The Rufous Hummingbird winters in central Mexico.

Answer: b
Partnerships

It Takes a Village to Raise a Barn
Judith McBride—Willow Wind Teacher

The Willow Wind Community Learning Center (WWLC), KBO’s headquarters and part of the Ashland School District, is spearheading a capital campaign to raise $500,000 to renovate the historic barn located on the property. The renovated barn will provide a place for KBO and Willow Wind families to gather for group meetings and social events as well as an auditorium space for the Rogue Valley. It will include a small venue seating 200 for musical performances and community meetings.

The Willow Wind property is a rich area with ponds, fields and streams useful for environmental education. The renovated barn would contribute to this environmental education laboratory by providing a place for the KBO to conduct environmental education programs associated with our ongoing research.

This “Barn Raising” project is in need of contributions, local support, and volunteer help. If you would like to contribute to the barn renovation or show your support, contact Judith McBride at the Willow Wind Community Learning Center: 541-488-2684.

Partner Spotlight—Jackson and Klamath Counties

The Klamath Bird Observatory has been extremely successful in improving forest education opportunities and ecosystem monitoring of projects intended to enhance forest ecosystems in Jackson and Klamath Counties. The Secure Rural Schools and Community Self-Determination Act of 2000 Title II and III funds support our work in these areas. With these funds we have collected data on bird response to fire and fuels treatments, integrated KBO’s scientific findings with local land management policies and practices regarding wildfire, fuels reduction and restoration, and delivered educational programs to approximately 6000 students and adults.

Beginning in 2005, KBO is partnering with Wingwatchers and Klamath County to create educational curricula and student study kits for the Klamath Basin Birding Trail (www.wingwatchers.org). In addition, KBO will continue to monitor songbirds in the Klamath National Forest supported by Title II funds. This critical research enables us to understand how habitat management actions affect ecosystems.

In Jackson County, KBO plans to continue offering educational programs that transfer scientific information on forest health, wildfire, and fuels treatments to the public of all ages. In addition, we have proposed to collect data on bird response to the Oregon State University Small Diameter Utilization and Fire Risk Reduction Project. The information KBO collects will be useful in determining if this project is successful at restoring healthy forest ecosystems.

Both counties have shown tremendous support for KBO’s research and education projects. We look forward to continuing our partnership in the years to come!
KBO News

Welcome New Board Member - Dick Ashford

KBO is pleased to welcome new board member Dick Ashford, to the KBO family. A proven leader with excellent communication skills, extensive experience in program management, community, and environmental affairs, and a continuing student of birds and birding, Dick brings diverse experiences to our board of directors.

Dick is recently re-located from Sonoma, California with his wife Viki. Dick was very involved in the city of Sonoma serving as the mayor and city council member (2000-2004), as well as a board member for several environmental and community organizations. Dick enjoys leading tours and bird walks; keep your eyes out for him on KBO sponsored walks, Rogue Valley Audubon walks, and at the North Mountain Park Nature Center. Welcome Dick!

Upcoming events

Join KBO staff at the following events:

June 11, 2005: Songs of Bear Creek: 9:00-11:30 am. Meets at the Northwest Nature Shop.

June 17, 2005: Siskiyou Field Institute birding in the Cascade Siskiyou National Monument. Sign up with SFI: www.thesfi.org or call 541 592-3777. SFI offers several bird classes this summer!

June 16-18, 2005: Cooper Ornithological Society Meetings, Arcata, California. For more information visit: www.cooper.org

Wish List

KBO’s biggest strength is our ability to collect substantial amounts of data on birds and their habitats. You can help directly support our on-the-ground research by sponsoring the following critical components:

$600—one set of mist-nets

$500—one month stipend for one intern

$100—fuel cost of traveling to one point count route

$60—one mist net

July 17, 2005 Birds of the Cascade Siskiyou Monument walk with the Soda Mountain Wilderness Council (SMWC). Sign up with SMWC.
KBO Staff and Board

Staff
John D. Alexander, MS—Executive Director
Bob Frey—Biologist
Melissa Pitkin—Education and Outreach
Nat Seavy, MS—Research Associate
Jaime Stephens—Biologist

Board Members
Stewart Janes, PhD—Chair
George Alexander, MBA
Dick Ashford
Frank Lang, PhD
Margaret Widdowson, PhD

Research Director
C. John Ralph, ScD

KBO Intern Students

Ian Ausprey
Nick Bartok
Tana Ellis
Laurel Genzoli
David Hodkinson
Sarah Thompson
Deborah Zierten